

REMARKS

In the Advisory Action, the Examiner stated that Claim 37 is rejected only under the obvious-type double patenting. Claim 37, which depends from Claim 36, which depends from Claim 1, calls for the polymerizable component layer to be polycarbonate and the amount of polycarbonate must be at least 50 wt.% of the layer. Thus this layer is predominately polycarbonate with oligoester. The enclosed terminal disclaimer disclaims any portion of this application which would extend beyond the life of US Patent Application No. 11/141,238 (as being unpatentable over Claims 1-5, 9-16 and 19-23 of the copending application). This copending application has not received any indication of a Notice of Allowance. Accordingly, the incorporation of Claims 36 and 37 into Claim 1, make Claim 1 allowable.

The Examiner indicated in a telephone conversation with the undersigned that the objection against Claim 8 would be overcome by the incorporation of the word "and" which was inadvertently omitted from the Amendment After Final. With the incorporation of Claims 36 and 37 into Claim 1, it is submitted that Claim 1 and all its dependent claims (including claim 8) are allowable.

With respect to Claim 43, it is submitted that this claim, which calls for five layers such as that depicted in Figure 1 of the present application, is not obvious from the combination of Kim in view of Winkler as neither of these references disclose a five-layer composition. Specifically these references do not disclose a five-layer composition with a chemically reactive component layer, wherein the five layers, under compression, fuse together to form a composite.

In the Final Rejection, the examiner admits that Kim does not teach "a polymerizable component comprised of a macrocyclic oligomer. In col 1, Winkler notes that linear polyesters can be fabricated into articles by any one of various molding techniques. Then Winkler says at col 3, lines 1-4, that prior to the Winkler invention, it was not known that a mixture of macrocyclic polyester oligomer and a polymerization

catalyst could have a long and stable shelf life. Winkler says rather than use polyester and thermo form articles, it makes more sense to use the macrocyclic polyester oligomer/catalyst, inject it into a mold, and it will polymerize and take the form of the desired article. It teaches replacing polyester polymer with macrocyclic polyester oligomer. Accordingly the combination of Kim in view of Winkler would teach one to replace the resin rich layer 12 of Kim with the macrocyclic polyester oligomer/catalyst component of Winkler.

It does not teach one to use both the resin rich layer and the macrocyclic polyester oligomer, because that defeats the teaching of Winkler. Winkler says at col 1, lines 35 – 38 that you would use the macrocyclic polyester oligomer because it “exhibits low melt viscosity, allowing them to impregnate a dense fibrous perform easily”. Additionally Winkler says you can polymerize the macrocyclic polyester oligomer at a temperature “well below the melt point of the polymer” (such as that taught by Kim). And the reduced temperature allows the equipment cycles to be used more frequently – it takes less time to make the article. See Col 1. Lines 38 – 55 of Winkler. BUT if you combine the references as suggested by the Examiner, then the advantage of using Winkler is lost because you still have to heat and compress the combination of a thermoplastic resin, fibers and macrocyclic polyester oligomer.

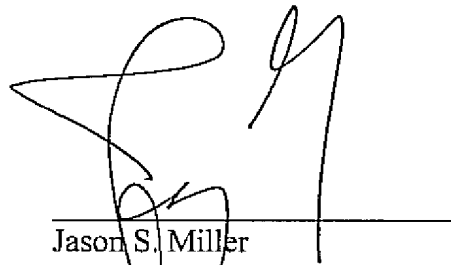
On page 8, line 13-16 of the present specification, it states that the macrocyclic polyester oligomer core is now on the outside surface of the composite. To accomplish this, the thermoplastic resin (initially on the outside) must at least reach its glass transition temperature (the temperature where it starts to liquefy) and preferably its melt temperature, in order for the oligomer to mix uniformly with the thermoplastic resin. In the example of the present application, it uses polycarbonate as the thermoplastic resin. It has a melt point of 300 °C. It is heated to 600 degrees F (315 degrees C). Thus the present invention liquefies the polycarbonate. It does not operate at a lower temperature etc as taught by Winkler. So why would one skilled in the art combine or add the macrocyclic polyester oligomer to the thermoplastic mentioned by Kim, yet keep heating the composite higher than suggested by Winkler, which would negate the benefit for the

lower temp etc, taught by Winkler. There is no reason to combine Kim and Winkler unless you first saw the disclosure of the present invention first.

Claim 47 is likewise a five-layer component composition wherein the core or center layer comprises a macrocyclic oligoester. The combination of Kim in view of Winkler does not disclose a five-layer composition and furthermore would not disclose a five-layer composition wherein the middle most layer includes a macrocyclic oligoester. Also this rejection also fails for the same reasons as mentioned above with respect to claim 43.

In view of the amendments to the claims and in light of the above remarks, it submitted that the present application is now in condition for examination and allowance.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'JSM', is written over a horizontal line.

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